

## ABSTRACT

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This research had aimed to obtain a deeper understanding of the chemical properties of painted alabaster sculptures, as well as some of their ageing mechanisms in order to design cleaning protocols which take into account the particular changing nature of these dynamic and complex systems.

Materials and some chemical properties of the case study have been characterised. Glass slides as well as mock-ups were elaborated and aged on alabaster, wood, and linen, with similar film forming materials as those that have been found in the case study. Was characterized the physical-chemicals properties like pH, conductivity, water solubility and sensitivity, contact angle and was done the chemicals analysis like the SEM-EDS, FTIR and optical microscopy.

During our research we've realize that painting materials don't react over time with alabaster as they do with other organic or even inorganic supports. Exactly the same mixture of binder (oil or glue) and pigment seems to react differently on different supports

**Palavras-chave:** pH; conductivity; polychromies on alabaster; surface cleaning